

#### REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

To clarify the claimed invention, original claims 1-7 have been cancelled in favor of new claims 8-12. No estoppel should be deemed to attach to the claim amendments.

Claims 1-7 were rejected under 35 USC §102(e) as being anticipated by Gilhousen (US 6,034,635). To the extent these rejections may be deemed applicable to new claims 8-12, the Applicants respectfully traverse.

It is well-settled that a claim is anticipated under 35 USC 102 only if each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Such a rejection requires that the identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Further, if an allegation of inherent anticipation is made, MPEP 2112 requires that it be supported by a *prima facie* case of "objective evidence" or "cogent technical reasoning" showing why the allegedly inherent subject matter is necessarily, and not merely possibly, present in the cited reference.

Independent claim 8 is directed to:

A base station apparatus comprising:

a first notifier that notifies a control station apparatus of first information to the effect that a communication terminal apparatus is performing a diversity handover;

a second notifier that notifies the control station apparatus of second information to the effect that a position detection is in progress;

a receiver that receives third information provided from the control station apparatus to the effect that, when said position detection is performed during said diversity handover, a target quality is to be changed to a level provided from the control station apparatus to enable satisfactory performance of said position detection; and

a transmit power controller that changes the target quality according to the third information and performs transmit power control of the communication terminal apparatus at the changed target quality.

Independent claim 12 is a method claim that is similar to claim 8, and claim 10 is directed to a control apparatus that provides the third information of claim 8.

Independent claim 9 is directed to:

A base station apparatus that determines a position of a communication terminal apparatus by determining a direction of said communication terminal apparatus utilizing an array antenna characteristic and by determining a distance to said communication terminal apparatus from a propagation delay, said base station apparatus comprising:

a target quality changer that raises a target quality when a position detection is performed during a handover; and

a transmit power controller that performs transmit power control of the communication terminal apparatus at the changed target quality.

Each of independent claims 8, 9, and 12 recite, *inter alia*, changing a target quality used with respect to transmit power control when a position detection operation is being performed during diversity handover. Claim 8 recites a receiver that receives third information provided from a control station apparatus to the effect that a target quality is to be changed to a level to enable satisfactory performance of position detection. Claim 12 recites a similar feature, though with respect to a method claim.

The invention of claim 9 is advantageous in a system wherein the angular position of the mobile terminal, relative to the base station, is measured utilizing an array antenna. The distance between the base station and the terminal is measured from a propagation delay of a communicated signal. From the measured angular position and distance information, the position of the mobile terminal may be determined.

According to each of the present claims, the accuracy of the position determination is improved by increasing the target quality used in connection with transmission power control when the position detection is going to be performed while a diversity handover is in progress.

The Office Action proposes that Gilhousen discloses the method of original claim 5 in Figs. 2 and 2A, column 21, lines 20-28, and

column 24, lines 20-28 (Office Action, page 5, 3<sup>rd</sup> paragraph, and page 3, 2<sup>nd</sup> paragraph). The Applicants respectfully disagree.

The Applicants note that Gilhousen discloses in Figs. 2 and 2A a system that performs a timing measurement between a mobile station and a second reception site (S220), when the mobile station is operating in a lower power mode on a normal voice channel (S210). Based on this timing measurement, the system attempts to determine a position of the mobile station (S230). If the system successfully determines the mobile station's position, then the mobile station continues operating in its low power mode on the normal voice channel (S210). Otherwise, the mobile station increases its transmission power (S240), and another timing measurement is made between the mobile station and the second reception site (S250). Thereafter, the mobile station resumes transmitting from its low power mode (S260), and the mobile station's position is determined from the timing measurement (S270).

In column 21, lines 20-28, Gilhousen discloses, in reference to Fig. 14, a cell-site that includes a cell-site control processor 48. Control processor 48 is coupled to data receivers 36, 38, and 46 and to searcher receivers 34 and 44. Control processor 48 provides signal processing, timing-signal generation, power control, and post-handoff control. Control processor 48 also

provides diversity combining, an interface with the mobile telephone switching office (MTSO), Walsh sequence assignment, and transmitter and receiver assignment.

In column 24, lines 20-28, Gilhousen discloses, in reference to Fig. 14, that signals from the MTSO are coupled to the appropriate transmit modulator, via digital link 52, under the control of control processor 48. Transmit modulator 54, under the control of control processor 48, spread-spectrum modulates the data for transmission to the intended recipient mobile unit. Also, the output of transmit modulator 54 is provided to transmit power control circuitry 56, where control processor 48 may control the transmission power.

From the above, it is apparent that Gilhousen merely discloses a technique of determining a mobile station's position based on the reception timing difference among three base stations or based on the reception timing difference between two base stations and the measured angle of a round trip signal.

In contrast to the Applicants' claims, Gilhousen discloses, with regard to controlling the mobile terminal's transmission power, only that this power is increased when the reception level at the base station is low.

Gilhousen does not disclose the claimed feature of changing the target quality used in connection with transmission power

control when a position detection is being performed while a diversity handover is in progress. Instead, Gilhousen merely discloses increasing the power when reception quality is low.

Gilhousen fails to disclose or suggest the subject matter of the present claims directed to a base station that informs a control station apparatus that a communication terminal apparatus is ready for a handover and that a position detection is in progress.

Gilhousen further fails to disclose or suggest a control station apparatus that provides to the base station or a communication terminal apparatus, when position detection is to be performed by the base station during diversity handover, information that a target quality is to be changed to a level provided from the control station apparatus to enable satisfactory performance of the position detection by the base station.

Gilhousen further fails to disclose or suggest a base station or a communication terminal that changes the target quality according to the information from the control station apparatus and performs transmit power control at the changed target quality.

Due to these recited features of the claims that are not disclosed by Gilhousen, it is submitted that Gilhousen fails to anticipate or render obvious claims 8-12. Therefore, allowance of claims 8-12 is warranted.

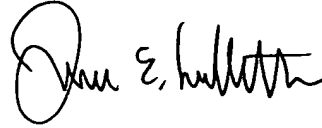
Finally, it is noted that the Office Action's analysis of Gilhousen consists merely of setting forth the elements of Applicants' claims and citing portions of Gilhousen that allegedly disclose such elements. This approach is improper because it (1) constitutes an improper hindsight approach that uses the Applicants' invention as a guide to pick and choose portions of the reference that allegedly correspond to the claimed elements and (2) provides absolutely no discussion of the reference or how the Office is interpreting the reference. As noted above, if the Office is alleging inherent disclosure of Applicants' claim elements, MPEP 2112 requires that the Office provide a cogent analysis of why the claim elements are necessarily present, and not merely possibly present, in the reference. The Applicants submit that such an analysis cannot be provided because Gilhousen nowhere even remotely teaches or suggests the present claimed invention.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the

undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



James E. Ledbetter  
Registration No. 28,732

Date: April 18, 2003  
JEL/DWW/att

Attorney Docket No. JEL 31215 PCT  
STEVENS DAVIS, MILLER & MOSHER, L.L.P.  
1615 L Street, N.W., Suite 850  
P.O. Box 34387  
Washington, D.C. 20043-4387  
Telephone: (202) 785-0100  
Facsimile: (202) 408-5200